

**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

Docket No: Q76973

Gerard VERGNAUD, et al.

Application. No.: 10/647,255

Group Art Unit: 2154

Confirmation No.: 3044

Examiner: Michael E. KEEFER

Filed: August 26, 2003

For: METHOD AND A SERVER FOR ALLOCATING LOCAL AREA NETWORK  
RESOURCES TO A TERMINAL ACCORDING TO THE TYPE OF INVENTION

**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

**Table of Contents**

|   |    |
|---|----|
| I. REAL PARTY IN INTEREST.....                          | 2  |
| II. RELATED APPEALS AND INTERFERENCES.....              | 3  |
| III. STATUS OF CLAIMS .....                             | 4  |
| IV. STATUS OF AMENDMENTS .....                          | 5  |
| V. SUMMARY OF THE CLAIMED SUBJECT MATTER .....          | 6  |
| VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL ..... | 8  |
| VII. ARGUMENT .....                                     | 9  |
| CLAIMS APPENDIX.....                                    | 13 |
| EVIDENCE APPENDIX:.....                                 | 23 |
| RELATED PROCEEDINGS APPENDIX.....                       | 24 |

**L. REAL PARTY IN INTEREST**

The real party in interest is ALCATEL-LUCENT, by virtue of an assignment executed by joint inventors Gerard Vergnaud and Francis Pinault executed on July 15, 2003, filed at the U.S. Patent and Trademark Office on August 26, 2003, and recorded by the Assignment Branch of the U.S. Patent and Trademark Office on August 26, 2003 (at Reel 014445, Frame 0504).

**II. RELATED APPEALS AND INTERFERENCES**

Upon information and belief, there are not other prior or pending appeals, interferences or judicial proceedings known to Appellant's representative or the Assignee that may be related to, be directly affected by, or have a bearing on the Board's decision on Appeal.

### **III. STATUS OF CLAIMS**

Claims 1-44 are all of the pending claims in the application.

Claims 1-16, 21-23, and 25-42 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent Appl'n Publ'n No. 2002/0075844 A1 to Hagen ("Hagen") in view of U.S. Patent No. 6,408,336 to Schneider ("Schneider").

Claims 17-20 and 24 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hagen in view of Schneider and Comer, "Internetworking with TCP/IP Vol. I". (Evidence Appendix.)

Claims 43 and 44 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hagen in view of Schneider.

All of the claims pending in the present application are set forth in their entirety in Appendix A, attached to this brief on Appeal.

**IV. STATUS OF AMENDMENTS**

Claims 1-44, have not been amended subsequent to the Final Office Action of June 21, 2007. The claims, thus, stand as presented before the Final Office Action of June 21, 2007.

## **V. SUMMARY OF THE CLAIMED SUBJECT MATTER**

The present invention relates to communication between terminals within networks, and more particularly to methods and apparatuses for allocating local area network resources to terminals. (Specification at p. 1, lines 6-9; p. 2, lines 8-10.)

The concise description of the claimed subject matter of the present invention is set forth below with regard to independent claims 1 and 28. The following discussion includes citations to various portions of the present application in order to aid in an understanding of the invention by reference to certain exemplary embodiments. These citations, unless otherwise indicated, are intended only to point out supporting exemplary embodiments and are not to be construed as limiting the scope of the claims.

### **A. Independent claim 1**

Independent claim 1 is directed to “[a] processing server for allocating to user terminals resources of a local area network, said server adapted to be connected to at least one local area network access point.” (E.g., Specification at p. 10, lines 1-6; p. 17, line 37 to p. 18, line 24; Fig. 1.)

The processing server comprises “control means” (E.g., Id. at p. 10, line 37 to p. 11, line 2; Fig. 1) which are “adapted to classify the terminals into a first group or a second group according to whether or not they are adapted to establish with said local area network communications encrypted in accordance with at least one format” (E.g., Id. at p. 17, lines 25-32) and are adapted to “allocate resources of said local area network to terminals attempting to establish communication therewith as a function of whether they are classified in said first group or said second group” (E.g., Id. at p. 17, line 37 to p. 18, line 24).

**B. Independent claim 28**

Independent claim 28 is directed to “[a] method of allocating resources of a local area network to user terminals via at least one access point to said local area network.” (E.g., Specification at p. 17, lines 12-15.)

The method comprises “in the case of an attempt at setting up a connection with said local area network by a terminal of said terminals, classifying said terminal in a first group or a second group according to whether said connection is encrypted in accordance with at least one format” (E.g., Id. at p. 17, lines 25-32) and “allocating resources of said local area network to said terminal as a function of whether it is classified in said first group or said second group” (E.g., Id. at p. 17, line 33 to p. 18, line 24).

**VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

- A. Whether claims 1-16, 21-23, and 25-42 are unpatentable under 35 U.S.C. § 103(a) over U.S. 2002/0075844 A1 to Hagen (“Hagen”) in view of U.S. Patent 6,408,336 to Schneider (“Schneider”).
- B. Whether claims 17-20 and 24 are unpatentable under 35 U.S.C. § 103(a) over Hagen in view of Schneider and Comer, “Internetworking with TCP/IP Vol. 1”.
- C. Whether claims 43 and 44 are unpatentable under 35 U.S.C. § 103(a) over Hagen in view of Schneider.

## VII. ARGUMENT

### A. Claims 1-16, 21-23, and 25-42 are Patentable Over Schneider and Hagen

Claim 1 requires “control means adapted to classify the terminals into a first group or a second group according to whether or not they are adapted to establish with said local area network communications encrypted in accordance with at least one format.” (emphasis added.) The Examiner contends that the combination of Hagen in view of Schneider teaches the above quoted element of claim 1.

In the Advisory Action of October 2, 2007, the Examiner states that “Schneider clearly uses encryption as a standard for determining access to resources.” The Examiner quotes in support of this argument Schneider at col. 10, lines 9-22, which states that “[t]he trust level of a request has a number of components: . . . if the access request is encrypted, the trust level of the encryption technique used; the stronger the encryption technique the higher the trust level.” Thus, Schneider discusses use of a “trust level” required to access a resource, the trust level having a number of components, including “the trust level of the encryption used.”

Appellant respectfully submits that the “trust level” of Schneider is distinguishable from claim 1, which requires classification of terminals “according to whether or not they are adapted to establish . . . communications encrypted in accordance with at least one format.”

The portion of Schneider cited by the Examiner teaches that the “trust level” is based on multiple factors, one of which, for example, is “the identification technique used to identify the user.”

Thus, in Schneider, access to the resource in question may clearly be allowed in the case that an identification technique having a high trust level is used, even without the use of encryption. Furthermore, in Schneider, even when encryption is used, access to the resource

may be denied when the identification technique or the path taken by the request have a low trust level. Moreover, it is not even the use of encryption itself, but rather, the “trust level of the encryption technique” in Schneider which is considered. (emphasis added.) Thus, even when encryption is used in Schneider, access to the resource may be denied because the encryption technique has a low trust level.

In contrast, claim 1 requires that classification of the terminals be “according to whether or not they are adapted to establish” encrypted communications. (emphasis added.) This requirement of claim 1, therefore, clearly is a different method of classification resulting in significantly different results than the method of Schneider. The mere fact that the “trust level of the encryption technique” is considered in Schneider is, therefore, not sufficient to teach or suggest that Schneider classifies terminals according to the method required by claim 1.

Thus, Hagen and Schneider, alone or in combination, fail to teach or suggest each and every element of claim 1. The cited references, therefore, fail to render claim 1 unpatentable.

Independent claim 28 which recites features similar to those of independent claim 1 is, therefore, also patentable at least for reasons analogous to those presented above with respect to claim 1. The Examiner’s citation of Comer, “Internetworking with TCP/IP Vol. 1,” fails to make up for the above described deficiencies of Schneider, as Comer is cited merely for its alleged teachings of a cabled interface, namely Ethernet, and of a wireless LAN. Thus, the combined references, taken as a whole for what they would have suggested to one of ordinary skill in the art at the time of invention, fail to render claim 28 unpatentable.

Regarding dependent claims 2-16, 21-23, 25-27, and 29-42, Appellant respectfully submits that these claims are patentable at least by virtue of their dependency from independent claims 1 and 28.

**B. Dependent Claims 17-20 and 24 are Patentable Over Schneider, Hagen, and Comer**

Claims 17-20 and 24 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hagen in view of Schneider and Comer, “Internetworking with TCP/IP Vol. 1”.

Claims 17-20 and 24 depend directly or indirectly from independent claims 1 and 23. Because Comer, whether considered alone or together with the combined teachings of Schneider and Hagen, fails to compensate for the deficiencies of Schneider and Hagen as set forth above with regard to claim 1, Appellant respectfully submits that claims 17-20 and 24 are allowable at least by virtue of their dependency.

**C. Dependent Claims 43 and 44 are Patentable Over Schneider and Hagen**

Claims 43 and 44 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hagen in view of Schneider.

The deficiencies of the Schneider and Hagen being set forth above with regard to claim 1, from which claims 43 and 44 depend, Appellant respectfully submits that claims 43 and 44 are allowable at least by virtue of their dependency.

**D. Conclusion**

The USPTO is directed and authorized to charge any fee required under 37 C.F.R. § 41.37(a) and 1.17(c), except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

**/Kelly G. Hyndman 39,234/**

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

Kelly G. Hyndman  
Registration No. 39,234

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: December 28, 2007

## CLAIMS APPENDIX

### **CLAIMS 1-44 ON APPEAL:**

1. (previously presented): A processing server for allocating to user terminals resources of a local area network, said server adapted to be connected to at least one local area network access point, said server comprising:

control means adapted to

classify the terminals into a first group or a second group according to whether or not they are adapted to establish with said local area network communications encrypted in accordance with at least one format; and

allocate resources of said local area network to terminals attempting to establish communication therewith as a function of whether they are classified in said first group or said second group.

2. (previously presented) The server according to claim 1, wherein said control means are adapted to determine a MAC address of each of said terminals attempting to establish communication with said local area network; and

said processing server further comprises means for allocating an IP address to each of said terminals attempting to establish communication with said local area network, and having the MAC address determined by said control means.

3. (previously presented) The server according to claim 2, wherein said allocation means are of the DHCP type.

4. (previously presented) The server according to claim 2, further comprising a memory for storing a table containing primary MAC addresses associated with first terminals of said terminals, said first terminals adapted to exchange data frames encrypted in accordance with said at least one format.

5. (previously presented) The server according to claim 4, wherein said table contains secondary MAC addresses associated with second terminals of said terminals, said second terminals adapted to exchange unencrypted data frames.

6. (previously presented) The server according to claim 5, wherein:  
said control means are adapted to make a determination as to whether an extracted MAC address, extracted from a received frame, is one of said primary or secondary MAC addresses and,

if said determination is affirmative, to send the allocation means a request to allocate a primary IP address to the terminal corresponding to said extracted MAC address, so that said terminal can set up a link with at least one first remote network and one second remote network and,

if said determination is negative, to send the allocation means a request to allocate a secondary IP address to the terminal corresponding to said extracted MAC address, referred to as a third terminal, so that said third terminal can set up a connection with at least one second remote network.

7. (previously presented) The server according to claim 4, characterized in that said first terminals are associated with said first remote network.

8. (previously presented) The server according to claim 7, characterized in that said second terminals belong to known users of said first remote network.

9. (previously presented) The server according to claim 6, wherein:  
each first remote network is selected from a group comprising private networks, IP data networks, and public switched telephone networks; and  
each second remote network is selected from a group comprising IP data networks and public switched telephone networks.

10. (previously presented) The server according to claim 6, wherein said control means are adapted to allocate at least two priority levels for said allocation of resources of the local area network according to whether communications are encrypted in accordance with said at least one format.

11. (previously presented) The server according to claim 10, wherein the MAC addresses in said table are stored in corresponding relationship to at least one of said priority levels.

12. (previously presented) The server according to claim 11, wherein said priority levels comprise:

at least one first priority level allocated to first terminals associated with primary MAC addresses; and

one second priority level allocated to second terminals associated with secondary MAC addresses.

13. (previously presented) The server according to claim 12, wherein said control means are adapted to allocate a third priority level for allocation of resources of the local area network to said third terminals setting up communications not encrypted in accordance with said at least one format and whose MAC addresses are not in said table.

14. (previously presented) The server according to claim 11, wherein said priority levels apply at least to a bandwidth, and said bandwidth decreases from the first level to the third level.

15. (previously presented) The server according to claim 14, wherein said control means send said access point data representative of said bandwidth assigned to a designated terminal, and said access point allocates the corresponding resources to said designated terminal.

16. (previously presented) The server according to claim 10, wherein said control means are adapted to modify an allocated priority level as a function of the available resources of said local area network.

17. (previously presented) The server according to claim 1, said server adapted to be connected to said local area network by a cable connection.

18. (previously presented) The server according to claim 17, said cable connection being an Ethernet link.

19. (previously presented) The server according to claim 1, said server adapted to be connected to said local area network by a radio link.

20. (previously presented) The server according to claim 19, wherein said radio link is a 802.11b radio link.

21. (previously presented) A router, including a processing server according to claim 1.

22. (previously presented) A local area network access point, including a processing server according to claim 1.

23. (previously presented) A communication installation comprising:  
at least one local area network accessible via at least one access point;  
at least one first remote network;  
at least one second remote network; and  
a processing server according to claim 1, which is connected to said access point and said first and second remote networks.

24. (previously presented) An installation according to claim 23, wherein said local area network is a wireless local area network.

25. (previously presented) An installation according to claim 23, wherein said processing server is connected to said first remote network via a virtual private network.

26. (previously presented) An installation according to claim 23, wherein said processing server is connected to said first remote network via a remote access server.

27. (previously presented) An installation according to claim 23, wherein:  
each said first remote network is chosen from a group comprising private networks, IP data networks, and public switched telephone networks ; and  
each said second remote network is selected from a group comprising IP data networks and public switched telephone networks.

28. (previously presented) A method of allocating resources of a local area network to user terminals via at least one access point to said local area network, said method comprising:  
in the case of an attempt at setting up a connection with said local area network by a terminal of said terminals, classifying said terminal in a first group or a second group according to whether said connection is encrypted in accordance with at least one format; and  
allocating resources of said local area network to said terminal as a function of whether it is classified in said first group or said second group.

29. (previously presented) The method according to claim 28, further comprising:

in the event of an attempt by said terminal to set up a connection with said local area network, determining a MAC address of said terminal, and allocating an IP address to said terminal.

30. (previously presented) The method according to claim 29, further comprising:  
providing a table containing primary MAC addresses associated with first terminals of said terminals, said first terminals adapted to exchange data frames encrypted in accordance with said at least one format.

31. (previously presented) The method according to claim 30, wherein said table contains secondary MAC addresses associated with second terminals of said terminals, said second terminals adapted to exchange unencrypted data frames.

32. (previously presented) The method according to claim 31, further comprising:  
making a determination as to whether an extracted MAC address, extracted from a received frame, is one of said primary or secondary MAC addresses; and  
if said determination is affirmative, allocating a primary IP address to the terminal corresponding to said extracted MAC address so that it can set up a connection with at least one first remote network and one second remote network; and  
if said determination is negative, allocating a secondary IP address to the terminal corresponding to said extracted MAC address, referred to as a third terminal, so that said third terminal can set up a connection with a least one second remote network.

33. (previously presented) The method according to claim 30, wherein said first terminals are associated with said first remote network.
34. (previously presented) The method according to claim 33, wherein said second terminals belong to known users of said first remote network.
35. (previously presented) The method according to claim 32, wherein:
- each first remote network is selected from a group comprising private networks, IP data networks, and public switched telephone networks; and
  - each second remote network is selected from a group comprising IP data networks and public switched telephone networks.
36. (previously presented) The method according to claim 32, wherein at least two levels of priority for allocation of resources of the local area network are allocated according to whether communications are encrypted in accordance with said at least one format.
37. (previously presented) The method according to claim 36, wherein the MAC addresses in said table are stored in corresponding relationship to at least one of said priority levels.
38. (previously presented) The method according to claim 37, wherein said priority levels comprise :
- at least one first priority level allocated to first terminals associated with primary MAC addresses; and

at least one second priority level allocated to second terminals associated with secondary MAC addresses.

39. (previously presented) The method according to claim 38, wherein a third priority level for allocation of resources of the local area network is allocated to said third terminals setting up communications that are not encrypted in accordance with said at least one format and whose MAC addresses are not in said table.

40. (previously presented) The method according to claim 36, wherein said priority levels relate at least to a bandwidth, and said bandwidth decreases from the first level to the third level.

41. (previously presented) The method according to claim 40, wherein said access point is sent data representative of said bandwidth assigned to a designated terminal, and said access point allocates the corresponding resources to said designated terminal.

42. (previously presented) The method according to claim 36, wherein an allocated priority level is modified as a function of the available resources of said local area network.

43. (previously presented) The method according to claim 28, wherein said local area network is selected from the group comprising PSTN, PLMN, and Internet public networks, PABX private networks, and private communication gateways.

44. (previously presented) The method according to claim 43, wherein the PLMN public networks are mobile networks selected from the group comprising GSM, GPRS, and UMTS networks.

**EVIDENCE APPENDIX:**

Pursuant to 37 C.F.R. § 41.37(c)(1)(ix), submitted herewith are copies of any evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 or any other evidence entered by the Examiner and relied upon by Appellant in the appeal.

The following reference is provided as supplied by the Examiner with the Office Action of January 25, 2007, and listed on the form PTO-892 attached thereto:

Comer, Douglas. Internetworking with TCP/IP, Vol. 1. Prentice Hall, 2000. pp. 20, 50.

**RELATED PROCEEDINGS APPENDIX**

Submitted herewith are copies of decisions rendered by a court or the Board in any proceeding identified about in Section II pursuant to 37 C.F.R. § 41.37(c)(1)(ii).

None.

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Docket No: Q76973

Gerard VERGNAUD, et al.

Application. No.: 10/647,255

Group Art Unit: 2154

Confirmation No.: 3044

Examiner: Michael E. KEEFER

Filed: August 26, 2003

For: METHOD AND A SERVER FOR ALLOCATING LOCAL AREA NETWORK  
RESOURCES TO A TERMINAL ACCORDING TO THE TYPE OF INVENTION

**SUBMISSION OF APPEAL BRIEF**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith please find an Appeal Brief. The USPTO is directed and authorized to charge the statutory fee of \$510.00, and all other required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

**/Kelly G. Hyndman 39,234/**

Kelly G. Hyndman  
Registration No. 39,234

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: December 28, 2007